



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,116	11/25/2003	Mihai Albulet	003797.00694	4518
28319 7590 04/05/2007 BANNER & WITCOFF, LTD. ATTORNEYS FOR CLIENT NOS. 003797 & 013797 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051			EXAMINER CRIBBS, MALCOLM D	
			ART UNIT 2115	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/720,116

Applicant(s)

ALBULET, MIHAI

Examiner

Malcolm D. Cribbs

Art Unit

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 05 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-11, 13-17 and 19-23 is/are rejected.
- 7) ☒ Claim(s) 3, 12, 18 and 24-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/05/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-26 are presented for examination.

5

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

10

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15

Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hulvey [Publication No. US 2003/0197488] in view of Tzannes [Patent No. US 6,667,991].

As per claim 1, Hulvey teaches the invention comprising:

20

a batter power source [Fig. 2, 204];

a radio transceiver powered by the battery and having components for transmission and receipt of data [Fig. 2, 216];

a memory having instructions stored thereon [Fig. 2, 208]; and

a controller coupled to the transceiver and to the memory and configured to execute the instructions so as to [Fig. 2, 202]

25

create, via the transceiver, wireless connections with remote devices in any of a plurality of connection configurations[[0032], lines 6-10],

Hulvey discloses a method of wirelessly controlling the power of a remote device when no activity is detected such as when the host powers down or switches modes.

Hulvey does not teach a method detecting the presence of parameters identifying one

5 of a plurality of configurations and implementing a power management algorithm accordingly.

Tzannes teaches another method of controlling power between two wirelessly communicating remote devices when one of the devices included powers down or

10 switches power [Col 8 line 1]. Tzannes discloses:

detecting the presence, in a wireless transmission from a remote device, of one or more parameters identifying one of the plurality of configurations [Col 11, lines 46-50, wherein initially the transmitter and receiver exchange info indicating their minimum and maximum capabilities, thus identifying one or more of the plurality of configurations in
15 wireless transmission from a remote device], and

implementing, based on the configuration identified, one of the plurality of power management algorithms [Col 11 line 51 – Col 12 line 14; wherein, after identifying one of the plurality of configurations, it is determined whether the data rate is to be increased or decreased, and based on whether the new rate is supported it is

20 implemented. Further Tzannes indicates that the SRA method can be used in the same manner to implement different power modes [Col 14 lines 50-64].].

Tzannes has the additional feature of providing for seamless changes of transmission bit rates during operation that change transmission bit rates between power levels that range from full power to low power [Col 6 lines 5-8].

5 It would have been obvious to one of ordinary skill of the art having the teachings of Hulvey and Tzannes at the time the invention was made, to modify the remote device power controlling method of Hulvey to include the ability to implement power control based on those supported by both devices as taught by Tzannes. One of ordinary skill in the art would be motivated to make this combination of including determining power
10 control methods supported by a remote device in view of the teachings of Tzannes, as doing so would give the added benefit of providing for seamless changes of transmission bit rates during operation that change transmission bit rates between power levels that range from full power to low power [as taught by Tzannes above].

15 **As per Claim 2**, Hulvey discloses a device wherein the controller is configured to detect the presence of one or more parameters by determining if a wireless connection with the remote device has at least one parameter corresponding to an acceptably fast re-connection procedure [[0070]].

20 **As per Claim 4**, Hulvey discloses wherein the controller is configured such that the device is inactive if the device is not being used to generate or transmit data based on input from a human user of the device [[0058], lines 6-8, [0059]].

As per Claim 5, Hulvey discloses a device wherein the controller is further configured detect the presence of one or more parameters at the time of establishing a wireless connection with a remote device (Fig. 11, [0065], lines 19-24, [0066], lines 5-8).

5

As per Claim 6, Hulvey discloses a device wherein the plurality of power management algorithms comprises three or more power management algorithms [[0065], lines 1-12, 19-23, [0068], lines 1-5].

10 **As per Claim 7**, Hulvey discloses a device wherein the device is a computer input device [[0010]].

As per Claim 8, Hulvey discloses a device wherein the device is a computer mouse [[0032]].

15

As per Claim 9, Hulvey discloses a device wherein the device is a computer keyboard [[0033]].

20 **As per Claim 10**, Hulvey discloses a method for automatically selecting a power management algorithm in a battery-powered wireless device capable of creating wireless connections with a remote device in any of a plurality of connection configurations, comprising:

establishing a wireless connection with a remote device [[0065], lines 1-5].

Hulvey discloses a method of wirelessly controlling the power of a remote device when no activity is detected such as when the host powers down or switches modes.

- 5 Hulvey does not teach a method detecting the presence of parameters identifying one of a plurality of configurations and implementing a power management algorithm accordingly.

- 10 Tzannes teaches another method of controlling power between two wirelessly communicating remote devices when one of the devices included powers down or switches power [Col 8 line 1]. Tzannes discloses:

- determining wireless communication features supported by the remote device [Col 11, lines 46-50, wherein initially the transmitter and receiver exchange info indicating their minimum and maximum capabilities, thus identifying one or more of the
15 plurality of configurations in wireless transmission from a remote device]; and

- implementing a first power management algorithm if the remote device supports a first communication feature [Col 11 line 51 – Col 12 line 14; wherein, after identifying one of the plurality of configurations, it is determined whether the data rate is to be increased or decreased, and based on whether the new rate is supported it is
20 implemented. Further Tzannes indicates that the SRA method can be used in the same manner to implement different power modes [Col 14 lines 50-64]. It would be inherent to include implementing a second power management algorithm if the device does not

Art Unit: 2115

support the first wherein it is not supported by the device a deny message is sent in response and thus a another attempt can be sent with a different request in order to proceed with the method [Col 11 lines 61-64].]

5 Tzannes has the additional feature of providing for seamless changes of transmission bit rates during operation that change transmission bit rates between power levels that range from full power to low power [Col 6 lines 5-8].

10 It would have been obvious to one of ordinary skill of the art having the teachings of Hulvey and Tzannes at the time the invention was made, to modify the remote device power controlling method of Hulvey to include the ability to implement power control based on those supported by both devices as taught by Tzannes. One of ordinary skill in the art would be motivated to make this combination of including determining power control methods supported by a remote device in view of the teachings of Tzannes, as doing so would give the added benefit of providing for seamless changes of

15 transmission bit rates during operation that change transmission bit rates between power levels that range from full power to low power [as taught by Tzannes above].

As per Claim 11, Hulvey discloses a method wherein the first communication feature comprises support for an acceptably fast re-connection procedure [[0070]].

As per Claim 13, Hulvey discloses a method wherein the wireless device is inactive if the wireless device is not being used to generate or transmit data based on input from a human user [[0058], lines 6-8, [0059]].

5 **As per Claim 14**, Hulvey discloses a method of claim 10, further comprising:
implementing a third power management algorithm if the remote device does not support the first feature but supports a second feature [Fig. 11, [0065], lines 19-24, [0066], lines 5-8].

10 **As per claim 15**, Hulvey discloses a method Wherein said determining wireless communication features comprises determining wireless communication features at the time of establishing a wireless connection with a remote device [[0065], lines 1-12, 19-23, [0068], lines 1-5].

15 **As per Claim 16**, it is directed to a machine-readable medium to implement the method of steps as set forth in claim 10. Therefore, it is rejected on the same basis as set forth hereinabove.

20 **As per Claim 17**, Hulvey discloses a machine-readable medium wherein the first communication feature comprises support for all acceptably fast re-connection procedure.

As per Claim 19, Hulvey discloses a machine-readable medium wherein the wireless device is inactive if the wireless device is not being used to generate or transmit data based on input from a human user [[0058], lines 6-8, [0059]].

5 **As per Claim 20**, Hulvey discloses a machine-readable medium comprising further sequences of instructions that cause the processor to perform steps comprising:
 implementing a third power management algorithm if the remote device does not support the first feature but supports a second feature [Figure 11, [0065], lines 19-24, [0066], lines 5-8].

10 **As per Claim 21**, Hulvey discloses a machine-readable medium wherein said determining wireless communication features comprises determining wireless communication features at the time of establishing a wireless communication with a remote device [[0065], lines 1-12, 19-23, [0068], lines 1-5].

15 **As per claims 22**, it is directed to a computer input device to implement the method of steps as set forth in claim 10. Therefore, it is rejected on the same basis as set forth hereinabove.

20 **As per claim 23**, Hulvey discloses a method wherein the first communication feature comprises establishing a re-connection in a reduced amount of time [[0070]].

Claims 3, 12, 18, and 24-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Malcolm D. Cribbs whose telephone number is 571-272-5689. The examiner can normally be reached on M-F 8AM-430PM.

10 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

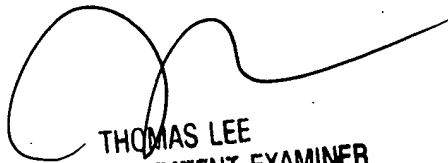
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.
15 Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information
20 system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Malcolm D Cribbs
Examiner
Art Unit 2115

Art Unit: 2115

April 2, 2007

MC



THOMAS LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100